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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
HAILU, TADESSE	
ART UNIT	**PAPER NUMBER**
2173	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/006,525	WONG ET AL.	
	Examiner	Art Unit	
	Tadesse Hailu	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the AMENDMENT submitted and entered on December 23, 2004 for the patent application number 10/006,525.

2. Applicant's arguments, see REMARKS, filed December 23, 2004, with respect to the rejection(s)of claim(s) 1-30 under Clapper (the reference of records) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made herein as follows.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 9, 10, and 12-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Barkan et al (5,536,930).

Barkan discloses an apparatus and method for sensing positional orientations of a portable terminal.

With regard to claim 1:

Barkan discloses a portable terminal (501) including at least a housing having a plurality of housing segments (e.g., front segment (503) and rear segment (505)).

The terminal also includes a plurality of functions or modules, wherein each modules being encased in one of the housing segments (e.g., bar code reader

functionality in the rear segment and touch pad and input device functionality in the front segment).

The terminal also includes a sensor (509a) to detect an orientation of the portable terminal (Abstract).

The terminal also includes a sensor for sensing different specific positional orientations of the housing (Abstract), wherein the sensor serves as a selection mechanism to alternatively activating at least one modules, that is, either the touch sensitive display (503) or the bar code reader (505) is activated alternatively, based on the detected orientation of the terminal (column 5, lines 15-28).

With regard to claim 2:

Barkan further discloses that each of the plurality of modules has a ser of user-interface features (e.g., touch sensitive display, input device, bar code reader) that can be at least alternatively controlled by the selection mechanism (e.g., sensor), and wherein the selection mechanism enables the set of user-interface features of the at least one selected modules (e.g., bar code reading functionality or touch sensitive display functionality) to be operational (column 5, lines 15-28).

With regard to claim 3:

Barkan further discloses that the terminal housing may have substantially the shape of a tablet with first and second planar surfaces. The first and second surfaces may be front and rear surfaces or other outer housing surfaces. Each surface panel surface includes user interface features. Baker also discloses the sensor serves as a selection mechanism to alternatively selecting and activating at least one of the user

interfaces of the panel surfaces, that is, either the touch sensitive display (503) or the bar code reader (505) (column 5, lines 15-28).

With regard to claim 4:

As illustrated in Fig. 2A or 2B, Barkan discloses that the front or first exterior panel (503) opposes the rear or second exterior panel (505) (column 5, lines 15-28).

With regard to claim 5:

Barkan further discloses that the sensor determines whether the front exterior panel (503) or the rear exterior panel (505) is positioned downward (Figs. 2A, 2B, column 7, lines 61-column 8, lines 31).

With regard to claim 6:

Barkan further discloses that the sensor detects a direction (e.g., upward or other) of gravity (column 9, lines 1-10).

With regard to claims 9:

Barkan further discloses that the selection mechanism is a processor configured to enable each of the functionality or modules individually or function alternatively (column 5, lines 15-28, column 11, lines 30-36).

With regard to claim 10:

Barkan further discloses that the front segment (503) includes a set of user interface elements including a display and a plurality of selectable switches 509, 510 and 510a (column 7, lines 7-22, column 9, lines 25-33).

With regard to claim 12:

Barkan further discloses alternatively (in turn operating, active or inactive, but not both) activating panel in response to detecting an orientation (Abstract, column 5, lines 15-28).

With regard to claim 13:

Barkan also describes operating a different function (bar code reading using the rear panel or displaying or inputting/tapping using the front panel); all depends on the detected orientation (column 4, lines 33-46).

With regard to claim 14:

Barkan discloses a method of configuring a portable terminal for use (column 3, lines 58-column 4, lines 6).

Barkan discloses a position orientation sensor for detecting an orientation of the terminal (Abstract).

Barkan discloses selecting a first function (module) from a plurality of modules to be operational based on the detected orientation of the terminal (Abstract, column 4, lines 33-46).

With regard to claim 15:

Barkan further discloses that detecting an orientation of the terminal includes detecting a direction of gravity (column 9, lines 1-10).

With regard to claim 16:

Barkan further discloses that detecting an orientation of the terminal is an automatic process in response to activating the terminal (Abstract, column 4, lines 33-46).

With regard to claim 17:

Barkan further discloses that detecting an orientation of the terminal includes detecting a downward (Fig. 2A) facing position module, and selecting one module from a plurality of modules includes selecting an upward (Fig. 2B) facing module that opposes the downward facing module (column 7, lines 61-column 8, lines 31).

With regard to claim 18:

Barkan further discloses maintaining a non-selected module in a non-active state until a new orientation is selected (column 8, lines 32-51, column 9, lines 11-24).

With regard to claim 19:

Barkan further discloses detecting a change in the orientation of the terminal to a new orientation (column 4, lines 33-54).

With regard to claim 20:

Barkan further discloses selecting a second module different than the first module in response to detecting a change in the orientation of the terminal (Abstract).

With regard to claim 21:

Barkan further discloses making the first module non-active in response to detecting a change in the orientation of the terminal. That is, the touch sensitive display and the emitter/receiver are typically and beneficially activated alternatively (column 5, lines 15-28).

With regard to claim 22:

Barkan discloses a first function ("a first module") and a second function ("a second module"). Barkan also discloses that the terminal includes a housing and a

sensor ("an orientation detection mechanism") for sensing different specific positional orientations of the housing (Abstract). In one specific position the terminal can be activated to perform a first function ("a first module"), such as accepting operator inputs, while in another positional orientation the terminal can be activated to perform a second function ("a second module"), such as optical scanning, which is different from the first function (column 4, lines 33-46). Thus, Barkan discloses a positional sensor that selects a function (module) to be active based on the sensing positional orientations of a portable terminal (Abstract).

With regard to claim 23:

Barkan further discloses that the orientation detection mechanism includes a sensor that detects the orientation (Fig. 1, 509a).

With regard to claim 24:

Barkan further discloses that the orientation detection mechanism includes a processor that activates the selected module (column 7, lines 24-40, column 11, lines 30-36).

With regard to claim 25:

Barkan further discloses that the orientation detection mechanism includes a processor that deactivates the selected module (column 11, lines 30-36).

With regard to claim 26

Barkan discloses a portable terminal that includes a housing having a plurality of surface including front or first surface (503) and a rear or second surface (505).

Barkan also discloses a first set of user-interface features (e.g., touch sensitive display) provided on the first surface (503).

Barkan also discloses a rear or second set of user-interface features (e.g., emitter/receiver window) provided on the rear or second surface (505) (also see column 7, lines 41-54).

Barkan also discloses a sensor (509a), a detection mechanism to detect an orientation of the potable terminal (Abstract).

Barkan also discloses a positional orientation sensor (Abstract), a selection mechanism to automatically select one of the first or second set of user interface features to be active, based on the detected orientation of the portable terminal (Abstract, column 4, lines 33-46).

With regard to claim 27:

Barkan also discloses a plurality of user interface features in both front and rear surface of the terminal, the front surface including a touch screen display, input device, and the rear surface including an input/output means for light receiver/emitter window.

With regard to claim 28:

Barkan also discloses that the selection mechanism is a component selected from a group of components consisting of a processor (column 11, lines 30-36), a display driver of touch display (503)(Fig. 1), and a switch (509) (column 7, lines 7-22).

With regard to claim 29:

Barkan discloses that the detection mechanism is a sensor capable of detecting gravity (column 9, lines 1-10).

With regard to claim 30:

Barkan further discloses that the front or first surface (503) is on a first panel, and wherein the rear or second surface (505) is on a rear or second panel that opposes the front panel (503) (see FIG. 1D or 2B).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 7, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barkan et al (US Pat No. 5,536,930) in view of Clapper (US Pat No. 6,704,007).

With regard to claim 7:

While Barkan discloses operational sensor (509a), but Barkan does not describe that said sensor is an accelerometer sensor. Clapper, on the other hand, describes accelerometer sensor (Fig. 5, #32).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to replace the accelerometer sensor of Clapper in palace of Barkan's sensor.

The suggestion /motivation for doing so would have been to provide an indication of the orientation of the portable terminal (Clapper, column 4, lines 59-62).

Therefore, it would have been obvious to combine Clapper and Barkan to obtain the invention as specified in claim 7.

With regard to claim 8:

Furthermore, while Barkan illustrates (e.g., Fig. 2A) a plurality of segments of the portable terminal, but it is not clear whether one segment is detachably coupled to the other segments. Clapper, on the other hand, illustrates (Fig. 1) detachably coupled segments (display and keyboard) of the portable device (10).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Clapper's portable device (with detachably coupled segments) in place of Barkan's portable terminal.

Therefore, it would have been obvious to combine Clapper and Barkan to obtain the invention as specified in claim 8.

With regard to claim 11:

Barkan in view of Clapper discloses a plurality of user interface elements on both sides of the electronic device's segment including display and a plurality of selectable surfaces (Clapper, Fig. 1).

Response to Arguments

5. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

CONCLUSION

6. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Tadesse Hailu, whose telephone number is (571) 272-4051. The Examiner can normally be reached on M-F from 10:30 – 7:00 ET. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, John Cabeca, can be reached at (571) 272-4048 Art Unit 2173.

7. An inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Examiner Tadesse Hailu
Art Unit 2173
7/19/05